

Abstract

A method and a device are described for detecting a fault current across a piezoelectric actuator (5) of an injector or its high voltage supply lead (6, 6a). Because the fault current upon contact with a person, for example, is relatively small compared to the useful current that charges or discharges the actuator, direct measurement of the current is not reliable. Therefore, it is suggested that, during the injection or in an injection pause, when the piezoelectric actuator (5) is charged, the voltage variation or a change in voltage (dU) be measured and the difference be compared to a predefined threshold value (S). When the threshold value (S) is exceeded, a fault message is produced, the voltage source is shut off, and/or the piezoelectric actuator (5) is discharged. The measured fault can be weighted using a counting algorithm. The method thus provides maximum protection upon contact, in particular for service personnel.